

# In Focus: Addressing food-related consumption-based emissions in C40 Cities

[Climate Action Planning](#)[Food](#)

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This report builds on *[The Future of Urban Consumption in a 1.5°C World](#)* to give more details about food-related consumption-based emissions across C40 cities, and highlights what cities can do to reduce them – measures which would also support better public health. It looks at opportunities for action in cities with different levels of emissions from food-related consumption, pathways to achieve equitable food consumption by 2030, and the potential benefits. It focuses on C40 member cities but the findings are relevant to cities more broadly.

## The report's headlines are:

- **Food is the biggest source of urban consumption-based emissions<sup>1</sup>**, representing 13% of the total. Food-related emissions could increase by 38% by 2050 under a business-as-usual scenario.
- Emission sources: 60% of food emissions are agricultural, 16% relate to electricity-use, 9% relate to fossil-fuel production and 5% for transportation.
- Food types: Consumption of animal-based food represents roughly 75% of food emissions, against 25% from consumption of plant-based foods.

The food sector offers emissions savings potential of up to 60% between now and 2050. The priority areas for interventions tackling these emissions, identified by this research and in order of impact, are:

- **Encouraging and supporting more plant-based diets**, which has by far the biggest opportunity for savings. While a small amount of meat and dairy can be eaten as part of a sustainable, healthy diet, quantities of animal-sourced food need to decrease significantly. Cities can help to make diets rich in vegetables, fruits, nuts and legumes an easier, affordable, accessible and more attractive choice.

- **Eating healthy quantities of food**, meaning an average of 2,500 kcal per person
- **Avoiding waste**, including reducing household food waste and supply chain waste.

These actions would have wide ranging benefits in cities, in particular:

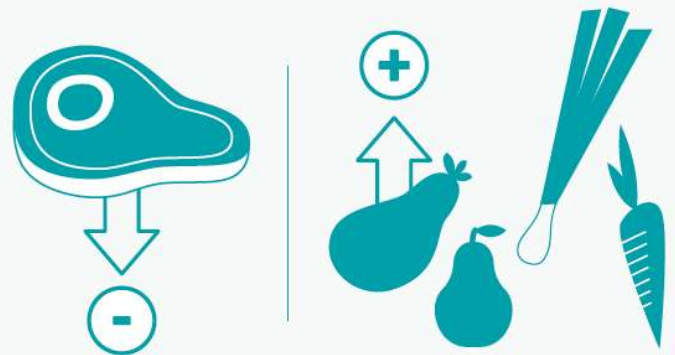
By avoiding **household food waste**, over a 20 year period, city residents in C40 cities **could save on average**

**\$5,500**



**Avoided food waste in the supply chain would save**

**\$25 billion**  
globally per year



**Eating less red meat and more vegetables and fruits could save**

**170,000**

**deaths per year** **\$600 billion**  
in C40 cities, equivalent to **based on the economic value of life.**

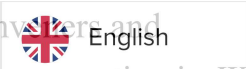
**Reducing dairy intake could save**



**19**  
**billion m<sup>3</sup>**  
**of freshwater**  
**per year**

**460**  
**billion m<sup>2</sup> of**  
**land per year**  
(equivalent to the **size of Spain** or **32 billion trees**)

Reducing emissions from food consumption, and realizing these benefits, requires action from all actors – government, business, cities, civil society and citizens. While city governments cannot directly change food consumption by citizens, they have an important role to play in influencing the availability and

affordability of foods, and in working with procurers, regulators, waste managers,  educators to affect change. Read more about the role of cities in shaping urban food consumption in *why cities should support access to healthy, sustainable food for all*.

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